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#### YMGI, Engineered HVAC & R Products for Maximum Green World and Better Tomorrow

Literature Part No: LIT-WMMS-(59)2-EU-DC IVTR-SERVICE MANUAL-20131130 Subject to Continuous Engineering Change and Product Improvement without Notice.

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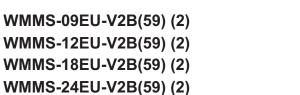


YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World!

# **INSTALLER'S INSTRUCTION & USER'S MANUAL**

# DC INVERTER MULTIPLE ZONE (59)2 **SYMPHONY CHOIR** INDOOR UNIT-CEILING/FLOOR MOUNT (EU)











# **A** WARNING

This product is designed and manufactured free from defects in material and workmanship for the normal use and maintenance. Installation, operation, maintenance and service shall follow professional practices for regular cooling and heating equipment, NEC, State, City or Local Codes and related manuals from YMGI. Otherwise, damage to equipment or property even injury to people may occur.

Installer: Currently licensed HVAC technician only. Read manual before installation. Fully fill in warranty registration card. User: Keep this manual for future maintenance and service use.

Servicer: Use this manual for service reference



LITERATURE: LIT-WMMS-(59)2-EU-DC IVTR-SERVICE MANUAL-20131130

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**All Units Shall Be Installed by Experienced or Licensed Contractor Or Technician. Read Manuals before Installation.** 

Following NEC, State and Local Codes and Installation Instructions of All Units, Otherwise Unit Warranty Will Be Void and Serious Damage To People Or Property May Be Caused.

**AWARNING**YMGI Group Will NOT Take Any Responsibilities for Any Damage or Loss Due to Do-It-Yourself(DIY) self-installation and other Improper Installation or Operation or Natural Disaster.

A WARNING

Don't Supply Power until All Wiring and Tubing and Checking is

Completed. Ground the Unit Following Instructions and NEC, State and Local Codes.

**ADANGER**Connect All Wiring Securely. Loose Wire or Other Bad Contact May Cause Arc or Overheating and Fire Hazard.

### WELCOME AND PLEASE READ THROUGH MANUALS

# Dear Customer(s)/end User(s)/unit Purchaser(s)/installer(s)/Contractor(s):

Thanks for choosing YMGI products.

The YMGI equipment you purchased is either a split-type or a self-contained cooling/heating system which requires an installer's license, certification, knowledge, experience, carefulness and details for a successful and good installation. This equipment is different from those window or portable air conditioners you can normally purchase from local retail stores such as Home Depot, Lowe's, Sears, etc. which the manufacturer may not require licensed personnel to install.

Reading and following the YMGI Group's recommendations, suggestions, and requirements, written in the following pages and other documents, is the first step to ensuring a smooth and trouble free installation & proper operation of your products for many years to come.

The quality of the installation plays a key role in whether the units will work well and for an extended period of time. The information we provide in our manuals is for the sole purpose of reminding you and your installer.

It is our ultimate goal to help insure that your YMGI units are installed properly and correctly from the very beginning to the very end. This ensures that your YMGI units will work well and not only provide a comfortable room but also peace of mind.

# **A** WARNING

YMGI doesn't recommend nor allow any do-it-yourself (DIY) installation (partially or fully), since DIY will cause problems sooner or later to your units and your upfront saving is Not saving down the road.

YMGI warranty doesn't cover any DIY units.

If you have any questions about your unit or even doubt if the unit has any problem, you can first check against the mannds. If you can not find answers, then you can contact your local installer or service technician to physically inspect the unit. If at the time of inspection the installer or service technician have any questions they can contact YMGI technical support division directly at:

Toll Free Number: (866)833-3138 Email: techsp@ymgigroup.com

#### IMPORTANT NOTE-YMGI HOLDS FINAL EXPLANATION:

YMGI Group, POB 1559, O'Fallon, MO 63366 is the only party who holds the final explanation (in authorized writing) about any descriptions or data in YMGI-published materials, including but not limited to YMGI product brochures, manuals, pamphlets, catalogs, videos and any other media. YMGI's distributors, installers, dealers, agents, customers or any other third parties shall not supersede YMGI to make any explanation about what YMGI-published materials mean. Any uncertainty or questions, arising from YMGI distributors, installers, dealers, agents, customers or any other third parties, should be passed directly to YMGI for an explanation in writing.





### WELCOME AND PLEASE READ THROUGH MANUALS

# **ATTENTIONS**

- 1. Be sure to hire only one certified, licensed HVAC Company to complete 100% of the installation so that all details of the installation are clear, complete and well taken care of.
- 2. Be sure to have ONLY the licensed HVAC professional perform all parts of the installation. Factory Warranty will be lost if any portion of the installation is not performed by licensed HVAC contractor. DIY or partial DIY will void ALL factory warranties. One example of partial DIY would be calling the HVAC technician to release refrigerant or the sort while other installation has or is to be conducted by non-HVAC technician.
- 3. With hiring a technician that is offering their services as a "side job" and not through their licensed HVAC company may pose a possible risk of an incomplete or unsatisfactory installation of no guaranteed workmanship and lack of further service, if needed.
- 4. Have the installing technician read in full the installation manual of the product model you have. Some details may vary and some may be the key to determine the success and quality of the installation. Experience with certain manufacturer may not be applied fully to another manufacturer. For example, wiring, refrigerant adjustment and trial testing procedures may differ from manufacturer to manufacturer and model to model. Any ignoring or negligence may cause unit failure or damage which could be irrevocable and permanent.
- 5. All of YMGI's products are fully tested and have passed rigorous safety and performance standards and others related to the industry, before being packed and shipped. YMGI only uses famous brands as suppliers for their parts that are also known for their high quality and performance. The quality of the installation plays a key role as much as up to 90% importance in your unit's overall performance and lifetime. A poor installation can result in unit failure and inefficiency either immediately or over a period of time.
- 6. Some licensed contractor/technician may make a mistake some time. YMGI doesn't supervise nor is able to control their installation. It is key that the installer take each variable into account during the initial installation in order to ensure a complete and professional installation and properly working units.

# **A** WARNING

The following will cause damage to the unit and key components and the loss of your unit's factory warranty:

- 1. Any foreign substances introduced into the system as a result of failure of not sealing the ends of the refrigeration piping before pulling through structures at time of installation.
- 2. Not installing an oil P-trap in the suction copper line where indoor unit is located 18' or more below outdoor unit.
- 3. Cross piping and/or cross wiring on any units including more than one single zone or a multi zone system.
- 4. Not conducting a positive leak check by charging the system with dry-nitrogen and soap bubble testing.
- 5. Not conducting a negative leak check by evacuating the copper lines for 30 minutes. Vacuum must be held at 500 micron or better for at least 5 minutes, starting from 5 minutes after the vacuum pump is shut off.
- 6. Not conducting a positive leak check prior to the negative leak check.
- 7. Not selecting the correct size of wire or circuit breaker.
- 8. Not answering ALL questions in the technician's checklist inside the warranty registration form.

# **A** WARNING

The following may be overlooked, ignored, or treated as not a problem during your installer's installation, but actually will cause your unit to underperform or even cause unit failure.

- 1. Any kinks or improper bending of the copper piping.
- 2. Any improper flaring or not centering of the flare with the nut, or not tightening any connection.
- 3. Not trial testing each indoor unit individually.
- 4. Not reading technical data (temp/time/pressure/current) after the system is stabilized (normally compressor needs to work at least 10 minutes). Data read too early may lead to inaccurate or false judgment or even a false sense of security.

In an effort to protect our customers from any possible faulty installation which can lead to premature unit failure, we like to provide the above information to you in addition to the technician. You can judge yourself and observe while your system is being installed, though your observation may not be treated as any guarantee whether your system would be installed properly and professionally. If at any time you feel there may be an installation issue, please have your technician contact YMGI at (866)833-3138 x 703 to clear your questions.



- 1) Check with the customers to find out detailed information of structure to be conditioned, local weather (typical design and extreme temperature/humidity conditions, cooling and heating hours), previous and existing HVAC equipment, usage and dependence on the new HVAC equipment or the YMGI products.
- 2) Performing a cooling/heating load calculation by using commercially available professional programs/methods such as Right-J (Manual J) for residential HVAC applications/jobs and Right-CommLoad (ASHRAE RTS/CLTD) for light commercial and commercial HVAC applications/jobs.
- 3) Check with YMGI distributor/sales or contact manufacturer directly to obtain information to fully understand YMGI products, including but not limited to product features, cooling/heating performance-at standard ratings/conditions and extreme conditions, allowed indoor and outdoor temperature/humidity ranges, installation, operation, maintenance, service,
- 4) Properly select correct (most suitable) YMGI product models (of units and accessories) for your HVAC applications/jobs and list them in your proposal/quote, in writing, on your company's quote form or letter head, basing upon the information you get from 1), 2) and 3) above.
- 5) List your currently valid HVAC license # and EPA # in your proposal/quote.
- 6) Make sure you are the only party to perform the whole installation job and you will not sub-contract any part of the installation to any non-licensed parties/persons. You will be solely responsibile for the full installation that you have been
- 7) Check to make sure you have all the materials you need to properly and correctly finish the installation. The YMGI units and accessories may be just a portion of what you need. YMGI employees and YMGI distributors/sales, dealers and agents are not installers and may only be able to provide suggestions to you, but you are the only sole decision maker to determine what other materials you must need and/or the customer may want to fulfill the installation job.
- 8) Check against both NEC and your local codes to make sure all the installation of YMGI units and accessories meet these
- 9) Connect the unit to correct electrical power source. In the area where lightning or storm incurs frequently, a proper type/ size of power surge protector needs to be installed between the outdoor unit and power source.
- 10) Select proper types and sizes of HVAC circuit breakers, disconnect switch boxes, wires and conduits from circuit breaker to disconnect box and then from disconnect box to outdoor unit.
- 11) Select proper location to mount indoor units and outdoor units with all factory requirements being followed (cooling/ heating/air is not blocked or restricted, mounting structure is secure, aesthetical looking, installation convenience is considered, maintenance/service clearance is ensured and all applicable codes are met and etc.).
- 12) Cap/tape the two ends of every copper line before running them through structures to keep from any foreign substances entering into pipe and causing contamination. Label them A-A, B-B, C-C, D-D, or other marks on each pair of copper line/wiring cable set to keep from any possible cross-piping or cross-wiring in multiple zone installations or where pipes for different single zone systems are close to one another.
- 13) Secure the wiring cables that connect between indoor unit and outdoor unit, following applicable NEC and local codes for your particular installation. If there is no special NEC or local code to govern how these wires are to be installed, you can tape/cable tie them along with insulated copper line.
- 14) Tighten all pipe and wire connections to keep from any possible leakage or false connection.
- 15) Conduct positive pressure leakage checking of inter-connecting copper lines between each indoor unit and outdoor unit by charging dry-nitrogen at outdoor unit service port (note: don't back-seat stopping valve, at this time). Liquid soap solution shall be applied at all pipe connections to check for leakage. A1/4-5/16" hose/valve adaptor may be needed if you have traditional manifold of 1/4" connection hose.
- 16) If there is no positive leaking, then conduct negative pressure leakage checking of inter-connecting copper lines between each indoor unit and outdoor unit by pulling vacuum at outdoor unit service port (note: don't back-seat stopping valve, at this time) and checking if the vacuum level 500 Micron can be held for at least 20 minutes.
- 17) If there is no leakage found at refrigeration pipe connections, flip up the indoor unit face panel and remove filter, carefully pour some clear water onto the up-right aluminum coil surface to test if the water can drain out of each indoor unit freely without any leakage being found.
- 18) If there is water leakage found, locate the source of the leak and correct. Only after everything is clear engage the correct electrical power to the system.
- 19) Then back-seat stopping valves of outdoor unit to release refrigerant from outdoor unit into inter-connecting pipes and
- 20) Check to make sure both indoor unit and outdoor unit are powered on correctly before controlling the indoor unit to operate in fan mode first. Then move on to test cooling, dehumidifying/drying, heating and other modes.
- 21) Read refrigerant pressures and pipe/valve temperatures only until the system is stabilized (normally 10 minutes after cooling/heating mode is started successfully). Put this data into the technician checklist in the lower half section of the Limited Product Warranty Registration Card/Form.
- 22) Adjust refrigerant charging level (remove refrigerant if pipe is shorter/temperature is colder; add refrigerant if pipe is longer/temperature is warmer), following manufacturer's instructions, if average pipe length is shorter or longer than 25' and pressure/temperature readings at outdoor unit service valves are not falling into normal ranges.
- 23) Explain to the user/owner(s) about proper unit operation and maintenance and leave your contact information for them to reach you easily.
- 24) If the customer finds the unit doesn't work properly and cannot resolve the issue themselves, check the customer's units/parts/accessories and correct the problem if there is any. Communicate with YMGI-technical support line (866)833-3138 x 703, if needing help.

Following these requirements will aid in ensuring the units to be installed to the general HVAC practicing standards and necessary factory requirements, finding any possible problems early, preventing any further damage to the unit and helping ensure a properly working unit over its lifetime.





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**MUST READ-1** 

# LIMITED PRODUCT WARRANTY POLICIES

The YMGI products are designed and manufactured free from defects in workmanship, and materials for normal use. However, for any reason, including many handlings and occasions between the YMGI factories/warehouses and where you receive the products, the unit doesn't work, YMGI Group will help to remedy the occurrence in the following warranting ways:

Compressor: YMGI will warrant the compressor of YMGI-validated and approved warranty filing, for a period of 5 years from the date of successful installation at original location.

Parts: YMGI will warrant parts of YMGI-validated and approved warranty filing, for one year from the date of successful installation at original location.

All warranty compressors and parts replaced will become the sole property of YMGI Group and must be returned to YMGI Group upon request. Warranty parts may be new or refurbished. All parts are tested and approved before shipping.

At no time does the YMGI Group warrant labor cost of any type. Warranty will start from the date of successful installation at initial location, or 90 days as of original shipping date from YMGI Group, whichever comes first.

#### This is a standard warranty of limited liability and DOES NOT cover the following:

- \* Any damage or repairs to properties, or persons as an incident or consequence of improper or faulty transportation, installation, operation, maintenance or service.
- Damage caused by frozen or broken water hoses or refrigeration pipes in the event of equipment failure.
- \* Any damage as a result of floods, fire, wind, lightening, accidents, corrosive atmosphere or any other conditions beyond the control of YMGI Group.
- \* Any damage due to interruption or inadequate electrical service to equipment.
- \* Any products that are installed outside the US or Canada.
- \* Any unit that has been moved from the original installation address.
- \* Any labor costs associated with the installation or service of the unit.
- \* Poor unit performance due to improper unit selection (SEER, Unit size).

#### To validate the above warranties, ALL the following conditions must all be fulfilled:

- 1. The unit was fully (100%) and successfully installed by licensed or certified HVAC technicians.
- 2. The unit was installed following all NEC, state and local codes.
- 3. The unit was installed following all instructions and manuals made by YMGI Group.
- 4. ALL fields, especially the technician-checklist, of the Limited Warranty Registration Card/Form were filled completely by the installing technician and signed by both the installing company technician and the unit owner.
- 5. The Limited Warranty Registration Card/Form and a copy of the original installing company's invoice had been received by YMGI Group-Warranty Dept., POB 1559, O'Fallon, MO 63366, within 7 days of successful installation.

No warranty filing will be validated or approved, if any one of the above 5 conditions is not met. Product registration doesn't guarantee the validity of this limited warranty statement.

#### Steps to follow for warranty part replacement:

- 1. Installing or service technician contacts YMGI tech support at 1-866-833-3138 ext 703 from the jobsite, to double-check and confirm with YMGI Technical support the exact part(s) needed to fix all the problems.
- 2. YMGI will check the customer's warranty filing. Parts for validated and approved warranty will not be charged. Parts of invalid warranty filing or unapproved warranty requesting, will be charged accordingly.
- 3. YMGI will ground ship out the parts ASAP. Expedited shipping is available at the customer's cost.
- 4. Replacement parts of approved warranty registration are to be warranted for the remainder of the 1 year parts and 5 year compressor warranty. Purchasing of replacement parts of invalid warranty filing or unapproved warranty requesting, will be as they are and bear no warranty.

YMGI keeps on improving products with various engineering changes without prior notice. Such improvements or changes include but not limited to product specification, appearance, functions, sizes, packaging and others. These improvements or changes will not void the limited warranty stated herein. YMGI keeps the final explanation of this warranty policy.

# LIMITED PRODUCT WARRANTY REGISTRATION CARD



# LIMITED PRODUCT WARRANTY **REGISTRATION CARD / FORM**

YMGI to	Fill Top Portion, at Shipping, and K	eep Cop	y A; Cen	ter Copy B for Installer to Fill a	and Mail back to YM	IGI; Bottom	Copy C for Custo	mer to Fill and Keep	
For	The Company the Shipping Packing Unit Was Sold Though: List Number:		Shipping Packing List Number:		Registrati Serial No	ion Card 			
YMGI Use	Did the Company Pay to YMGI:			HVAC Contractor/ Technician-Name		Date the Card YM0	Filled Registrati GI Received:	on	
Only	Installation Invoice Attached to the Registration Card			Hired YMGI-Recommende  HVAC Contractor/Technici	an?		ully (Yes/No): _		
	or Serial Number (One Outdoor One Registration Card/Form):	Indoor Serial Number:	For Multi Zone Units	Unit #1 Unit #2 Unit #3 Unit #4		Un Un	it #6 it #7		
	act Where the Units are Installe								
	:: :SS:							Fax:	
	State (Provi								
	act of the Installing HVAC Contician Full Name (Print):				YMGI-Recomme			cian:	
HVAC	Technician's Company Name: _				Email:				
Addre		Taabaiai	I i	and an Contification Number				Cartified by:	
	ntly Licensed or Certified HVAC all Phone # to Check the License					Licens	e Approved or C	Sertified by:	
List for	Installating HVAC Technician to Do	uble Che	ck Insta	llation Quality, and Warranty P	rocessing Purpose	(if not filled	by technician, or	not filled fully, warra	nty will void)
1) Are If n	you the only one to install whole ot, % of installation done			echnician).	2) What had bee	n done, prid	or to your arriva	1?	
	you read the User Manual and I rted the installation?	nstallatio	on Instr	uction, before you	4) Who unpacked	d the unit a	nd accessory bo	oxes to check for da	mage?
	oply electrical power V/Ph/Hz me oor unit: out	asured a door uni	at wiring t:	g terminal block of	6) Incoming electindoor unit:	trical power	V/Ph/Hz meas outdoor	ured at terminal bloo unit:	cks of
	e gauge, length and terminal col connect switch to outdoor unit:	ors betw	een cir	cuit breaker/	8) Wire gauge, le outdoor unit: L	ength and te Jnit A	erminal colors be Unit B	etween each indoor Unit C	and Unit D
	e size of HVAC circuit breaker/fus door unit:	se or dis	connec	t switch to the	units installed/	covered/prote	ected by line set	lines between indoor covers, or anything e	
OL	hat is the refrigerant pipe length utdoor unit? Unit A Unit	В	Unit	C Unit D	12) Where is/are Unit A	Unit E	B	C Unit D.	
οι	hat is the elevation difference be utdoor unit? Unit A Unit door unit above outdoor unit +, b	В		oor unit and the C Unit D			r unit for conder er connecting the	nsate leakage and r em?	efrigerant
´ G	here is the outdoor unit located? round wall balcony roof other cation or pad	grou		oor unit anchored to ecured onto wall		between an		s no cross-piping an lits (zones)? How did	
17) W th	ere the refrigerant pipe ends capem through structures to keep de	ped or t bris fror	aped se n enter	eal, prior to running ng the copper lines?	18) Have you che working fine?		run cooling or h	eating, one unit by o	one unit, all
<sup>'</sup> ni	id you charge the inter-connection trogen to check for positive leake and ucting vacuuming leakage che	ige (pres						nnecting pipes and inding, for how many m	
	id you check if the compressor correct (design) manner?	an be sta	arted ar	nd stopped in a				upplied or recomme erant added or dedu	
W	easured refrigerant pressures at ou as st. eat pump (PSI): Cooling (PSI):			ction valve, when unit bient Temp. (°F):	24) What were the At cooling: ind At heating: ind	loor return a	ir <sup>°</sup> F, dischär	robe not touching any ge air °F, and outo ge air °F, and outo	door °F
	ave you checked all unit function nctions are correct?	s, with c	ustome	r's witness, and all	26) Did you show	the user ho	w to operate the	unit? Did he/she und	derstand you?
	o you provide regular one-year fr stallation?	ee techr	nical se	rvice for this	28) Do you list th customer?	e working o	details in the inv	roice and leave a co	py to the
	ation Finished and Unit Works S Name of Installation HVAC Techr ture:		ılly.		Installation Finish Print Name of Ov Signature:		it Works Succes	ssfully.	
Date	and time:				Date and time:				

By signing above, I acknowledge the liability and responsibility for any false statement or not telling all the facts, and I authorize YMGI to check the details of the filled above, and make its decision on warranty. I understand our filing or filling the warranty card/form DOESNT mean automatic warranty approval, because warranty is approved only to those qualified and successful installations by qualified HVAC technician. I know the warranty, if approved, is a standard 5-year compressor and 1-year other parts only, without any labor coverage. I agree to and will follow all the contents contained in the Limited Product Warranty Policy that YMGI, not other entity, stated in public, including but not limited to manuals, web site, email, etc.

Important Note: A copy of the installing HVAC company's invoice to show all their work details, your payment proof, center copy B of this registration card filled after a successful installation, all three (3) MUST be mailed together to Warranty Dept., YMGI Group, POB 1559, O'Fallon, MO 63366, for warranty processing. Customer keeps bottom copy C. YMGI will check against copy A that was kept at YMGI.





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# WARRANTY AND TECH. SUPPORT

YMGI warrants to the purchaser/owner(s) that YMGI products be free from defects in material and workmanship under the normal use and maintenance, with the standard Limited Product Warranty Policies that comes with the unit or sales package.

#### YMGI IS NOT RESPONSIBLE FOR

- \* Damage or repairs required as a consequence Customer do-it-yoursely(DIY) installation and/or any other faulty installation or improper application.
- \* Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operation.
- \* Damage as a result of floods, winds, fires, lightening, accidents, corrosive atmosphere, or other conditions beyond the control of YMGI.
- \* Any damages to person or property of whatever kind, direct or indirect, special or consequential, whether resulting from use or loss of use of the product.
- \* Failure to start due to voltage conditions, blown fuses, open circuit breakers, or other damages due to the inadequacy or interruption of electrical service.
- \* Parts not supplied or designated by YMGI.
- \* Products installed outside USA or Canada.
- \* Regular equipment maintenance or field service or field inspection.
- \* Any problems due to improper cooling and heating load calcuation of the room/building the air conditioner/heat pump system is to be installed. Equipment users can get the calculation schedule from your room/building architect or your installation or related service HVAC contractor, who should have the knowledge and the tools to do these calculations correctly.
- \* Any problems due to improper sizing and selecting air conditioner/heat pump system. These equipment sizing and selection work should be conducted by either your room/building architect or your installation or related service HVAC contractor, who should have the knowledge and the tools to do these calculations correctly, and get your approval, before purchasing the air conditioner or heat pump equipment.
- \* Any problems due to improper installing of the air conditioner/heat pump system. Installation should be conducted by currently licensed HVAC technician, following manufacturer installation instructions, all governing safety codes, with care and professionalism.
- \* Any problems due to improper operation of the air conditioner/heat pump system. Users shall keep the manual and refer to it for the correct understanding of how the unit will work and how to operate the unit correctly.
- \* Any problems due to improper maintenance of the air conditioner/heat pump system. Like a car, regular maintenance or yearly checking is necessary for the unit to work properly for you, before the season comes. For example, air filter shall be checked for cleaness from time to time. Remote control batteries shall be checked for enough power, before judging the unit is not working...

#### CONTACT FOR FIELD SERVICE OR REPAIR

The following people, in a prioritized sequence, will take care of your request or issue:

- 1) The original installer; otherwise,
- 2) Your current service contractor; otherwise,
- 3) Authorized contractor in YMGI list that is close to you; otherwise,
- 4) Authorized Distributor in YMGI Distributor list; otherwise,
- 5) Contractor/Distributor you prefer who is close to you.

#### CONTACT FOR GENERAL TECHNICAL QUESTIONS OR SUPPORT, IN A SEQUENCE:

- 1) The original installer; otherwise,
- 2) The current service contractor; otherwise,

The original licensed installer or current service contractor should be contacted first of all, since they installed the unit and/or know more details than anybody else.

They will check the unit and find out the problems with the professional knowledge about HVAC and electric product installation by using special tools or instrument.

They can contact YMGI technical support for technical help during unit installation or inspection.

Product model and serial numbers needed, which can be found on unit nameplate sticker, so that our technician can quickly identify the unit, parts and wiring diagrams, among our many products and models.

- 3) The distributor; where the unit is purchased from otherwise,
- 4) YMGI Technical Support:

Tel: (866) 833-3138\*703

Email: techsp@ymgigroup.com

### INTRODUCTION

Ceiling Mount Cassette Systems are designed for high performance, easy installation and service. Each system consists of one or several indoor units and one outdoor unit, which are connected by one set or several sets of interconnection refrigerant pipes and electric wires.

As shown in the following sample picture, air is drawn through the center grilles/filters and then discharged at 4 vents in 4/8 directions. In cooling mode, air passing through coil is cooled; in heating mode, air passing through coil is heated.







**Outdoor unit** 

#### Sample Split System-Indoor and Outdoor Units

(For Continuous Engineering Improvement and Various Marketing Needs and Actual Part Availability Reason, Unit Appearance Subject to Change or Update Continuously without Prior Notice)

The electrical and thermal power for the whole system comes from the outdoor unit. In YMGI SHCR or TTWC series of side discharge outdoor condensing unit(s), electrical and thermal components such as compressors and motors and heat exchange coils and others, are incorporated into the cabinet in an optimized order. These condensing units can be either hung on the wall or installed on the ground. Once stacking or bracket kit is used, some outdoor units can be stacked 2 or 3 units high, upon unit size and applications. Air is discharged horizontally, quietly and smoothly. These units are a perfect fit in locations where installation and applications of general up-flow condensing units are limited, such as apartments, condos, lofts, multi-families and high-rise buildings and others.

Indoor unit(s) delivers the thermal and acoustical comfort to the rooms. In cooling mode, air passing through coil is cooled; in heating mode, air passing through coil is heated. Air is filtered or treated by the built-in mechanism (washable or enzyme equipped or electrostatic powered filter, varies from model to model), before being delivered into the room, with more than enough comfort and care, at a wide angle (swing or not, varies from model to model).







Office Buildings

Homes

# **Application Samples-Ceiling Mount Cassette**

# NOTES:

Since ductless system is not designed to incorporate or use with ducted return or discharge tunnels, one singlezone unit SHALL NOT be used to take care of the cooling or heating load of more than one-story room. Several single-zone ductless systems or multiple-zone ductless systems shall be used in this regard.

#### These units are designed for applications at:

- \* Residential
- \* Light commercial
- \* Commercial
- \* Institutional
- \* Industrial
- \* Hospital

These units are designed for general T-1 weather conditions as outlined in the following table:





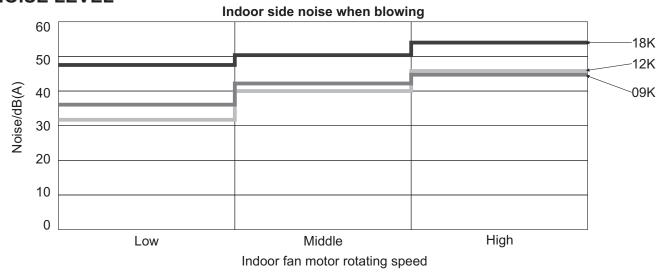
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# **UNIT SPECIFICATIONS**

# **GENERATION 1**

Items	Unit / Conditions	WMMS-09EU-V2B(59)	WMMS-12EU-V2B(59)	WMMS-18EU-V2B(5
Power Supply	Voltage/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
Fower Supply	Allowed Voltage Range	187-253V	187-253V	187-253V
Cooling Capacity (Btu/h)	High/Standard/Low	10700/9000/4600	14100/12000/5900	22500/18000/6800
	ID 70/60, OD 47/43F	10000	13500	19500
Heating Capacity (Btu/h)	ID 70/60, OD 17/15F	8800	11600	16600
	ID 70/60, OD 17/5F	6800	9200	14200
SEER	Btu/h.W	16	16	16
HSPF	Btu/h.W	8.2	8.2	8.2
Duhumidifying Capacity	Pints/Hr.	1.5	1.6	1.9
Air Flow (CFM)	High/Medium/Low	360/330/310	410/360/340	360/330/312
A: (I (51)	Horizontal Installation	35-30	Upon Mounting Height/Speed	l/Temp.
Air-throw (Ft.)	Upright Installation		Jpon Mounting Location/Spee	
External Static Pressure	Water In.	0	0	0
	Pressure dB(A) (H/M/L)	45/40/32	46/43/36	54/50/47
Sound Level	Power dB(A) (H/M/L)	55/50/42	56/53/46	64/60/57
	Model	FG10A	FG10A	FG20E
	Shaft	Double	Double	Double
	Speed (RMP, H/M/L)	790/670/550	790/670/550	1070/970/870
Fan Motor	Output (W)	10	10	40
	Input (W)	55	55	110
	Capacitor (uF)	1	1.5	3
	Type-Piece	Centrifugal-2	Centrifugal-2	Centrifugal-2
Fan Wheel	Diameter x Width (In.)	4.9 x 5.3	4.9 x 5.3	4.9x5.3
	Model Model	MP35CB	4.9 X 5.3 MP35CB	4.9X5.3 MP35CB
Swing/Step Motor	Piece	2	2	<u>МР35СВ</u>
Swirig/Step Motor	Output (W)	2	2	2
Input Power of Ele. Heater	,		NA	
Electrical Protection Fuse	Type-W PCB / Transformer	NA		NA
Electrical Protection Fuse		Δ1	T3.15A 250V / 0.2A	tula a
Evaporator Coil	Туре		. Fin/Inner Grooved Copper T	
	Color	Blue or the Like	Blue or the Like	Blue or the Like
Copper Line Connections	Sealed by Dry Nitrogen	Yes	Yes	Yes
Danie Hann O	Flare/Nut-Liuqid + Gas	1/4" + 3/8"	1/4" + 3/8"	1/4" + 1/2"
Drain Hose Connection	OD (In.)	0.67	0.67	0.67
Condensate Pump	Installed-Lift (In.)	NA	NA	NA
Refrigerant Environmental Friendly	R410A	Yes	Yes	Yes
Filter	Type-Feature	Standard-Washable	Standard-Washable	Standard-Washabl
	Size WxH (In.) - Qty.	21.8 x 8.68 - 2	21.8 x 8.68 - 2	21.8 x 8.68 - 2
Clean Coil Surface	Anti-Mildew Function	Yes	Yes	Yes
Pre-heating Function	Anti-Cold Blowing	Yes	Yes	Yes
Memory of Previous Set-ups	Power is Lost/Resumed	Yes	Yes	Yes
Auto-Restart Function	If Power is Resumed	Yes	Yes	Yes
Unit Dimensions	Net WxHxD (In.)	32.9 x 27.4 x 9.37	32.9 x 27.4 x 9.38	32.9 x 27.4 x 9.37
OTIL DITTETISIONS	Package WxHxD (In.)	36.8 x 31.7 x 11.6	36.8 x 31.7 x 11.7	36.8 x 31.7 x 11.6
Unit Weight	Net (LBs)	59.5	59.5	62
Onit Weight	Packaged (LBs)	78.2	78.2	81
Loading Capacity	20'/40'/40'HQ	112/232/274	112/232/274	112/232/274

# **NOISE LEVEL**

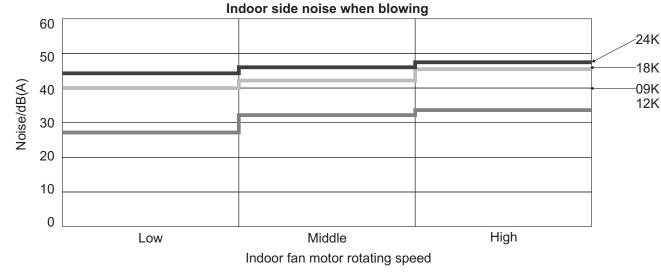


# **UNIT SPECIFICATIONS**

# **GENERATION 2**

Items	Unit / Conditions	WMMS-09EU-V2B(59)2	WMMS-12EU-V2B(59)2	WMMS-18EU-V2B(59)2	WMMS-24EU-V2B(59)		
	Voltage/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60		
Power Supply	Allowed Voltage Range	187-253V	187-253V	187-253V	187-253V		
Cooling Capacity (Btu/h)	High/Standard/Low	10700/8500/4600	14100/11900/5900	21500/17000/6800	26500/22800/9600		
coming capacity (amin)	ID 70/60, OD 47/43F	9500	13100	18700	27400		
Heating Capacity (Btu/h)	ID 70/60, OD 17/15F	8800	11600	16600	23600		
ricating capacity (Etain)	ID 70/60, OD 17/5F	8000	9100	13800	20600		
SEER	Btu/h.W	16	16	16	16		
HSPF	Btu/h.W	8.2	8.2	8.2	8.2		
Duhumidifying Capacity	Pints/Hr.	1.7	2.96	3.8	5.28		
Air Flow (CFM)	High/Medium/Low	383/324/265	383/324/265	559/412/294	736/530/412		
All I low (CI W)	Horizontal Installation	303/324/203		Height/Speed/Temp.	730/330/412		
Air-throw (Ft.)	Upright Installation		35-20 Upon Mounting				
External Static Pressure	Water In.	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O Location/Speed/Temp.	0		
External Static Pressure		-	•	•			
Sound Level	Pressure dB(A) (H/M/L)	40/38/36	40/38/36	45/42/40	48/46/44		
	Power dB(A) (H/M/L)	50/48/46	50/48/46	55/52/50	58/56/54		
	Model	FG10A	FG10A	FG20E	FG50A		
	Shaft	Double	Double	Double	Double		
Fan Motor	Speed (RMP, H/M/L)	690/610/480	690/610/480	985/800/680	985/800/680		
· all moto	Output (W)	15	15	20	40		
	Input (W)	55	55	110	145		
	Capacitor (uF)	1	1	2.5	2		
Fan Wheel	Type-Piece	Centrifugal-2	Centrifugal-2	Centrifugal-4	Centrifugal-4		
ran wheel	Diameter x Width (In.)	5.5 x 4.1	5.5 x 4.1	5.5 x 4.1	5.5 x 4.1		
	Model	MP35CB	MP35CB	MP35CB	MP35CB		
Swing/Step Motor	Piece	2	2	2	2		
	Output (W)	2	2	2	2		
Input Power of Ele. Heater	Type-W	NA	NA	NA	NA		
Electrical Protection Fuse	PCB/Transformer	T3.15A 250V / 0.2A					
	Type	Alu. Fin/Inner Grooved Copper Tube					
Evaporator Coil	Color	Blue or the Like	Blue or the Like	Blue or the Like	Blue or the Like		
	Sealed by Dry Nitrogen	Yes	Yes	Yes	Yes		
Copper Line Connections	Flare/Nut-Liugid + Gas	1/4" + 3/8"	1/4" + 3/8"	1/4" + 1/2"	1/4" + 5/8"		
Drain Hose Connection	OD (In.)	0.67	0.67	0.67	0.67		
Condensate Pump	Installed-Lift (In.)	NA NA	NA NA	NA	NA NA		
Refrigerant Environmental Friendly	R410A	Yes	Yes	Yes	Yes		
Trongorant Environmental Friendly	Type-Feature	Standard-Washable	Standard-Washable	Standard-Washable	Standard-Washable		
Filter	Size WxH (In.) - Qty.	21.8 x 8.68 - 2	21.8 x 8.68 - 2	21.8 x 8.68 - 2	21.8 x 8.68 - 2		
Clean Coil Surface	Anti-Mildew Function	Yes	Yes	Yes	Yes		
Pre-heating Function	Anti-Cold Blowing	Yes	Yes	Yes	Yes		
Memory of Previous Set-ups	Power is Lost/Resumed	Yes	Yes	Yes	Yes		
Auto-Restart Function	If Power is Resumed	Yes	Yes	Yes	Yes		
Auto-Nestait i unctioli	Net WxHxD (In.)	48 x 27.6 x 8.9	48 x 27.6 x 8.9	48 x 27.6 x 8.9	48 x 27.6 x 8.9		
Unit Dimensions							
	Package WxHxD (In.)	52.8 x 32.3 x 11.8	52.8 x 32.3 x 11.8	52.8 x 32.3 x 11.8	52.8 x 32.3 x 11.8		
Unit Weight	Net (LBs)	88	88	88	99		
Landing C. "	Packaged (LBs)	110	110	110	119		
Loading Capacity	20'/40'/40'HQ	66/132/132	66/132/132	66/132/132	66/132/132		

# **NOISE LEVEL**

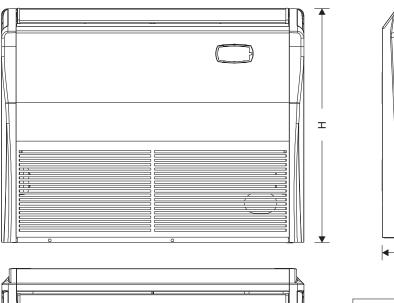


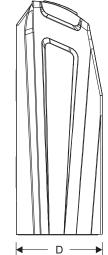




**BRIEF UNIT INFO** 

# **UNIT DIMENSIONS**





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27.4

27.4

D

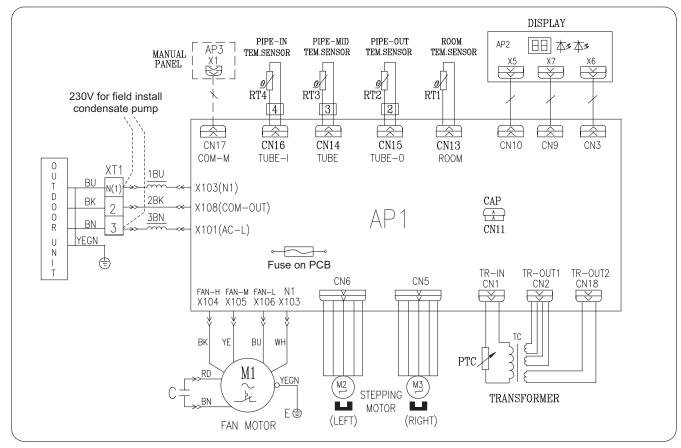
9.37

9.37

	w
Generation 1	33
Generation 2	48

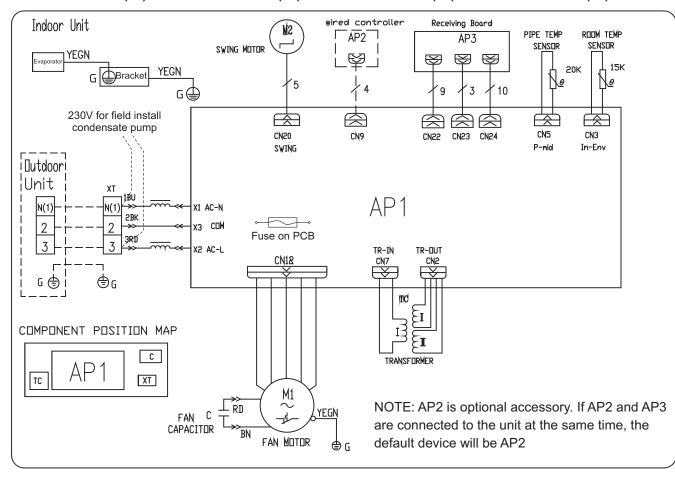
# **WIRING DIAGRAMS**

#### WMMS-09EU-V2B(59) / WMMS-12EU-V2B(59) / WMMS-18EU-V2B(59)



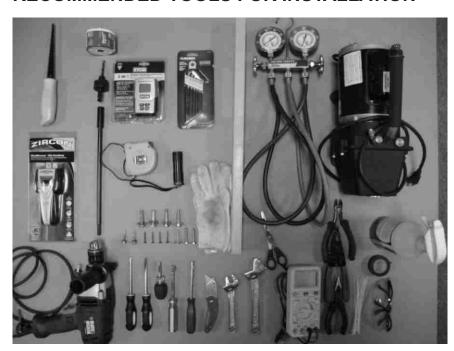
# **WIRING DIAGRAMS**

#### WMMS-09EU-V2B(59)2 / WMMS-12EU-V2B(59)2 / WMMS-18EU-V2B(59)2 / WMMS-24EU-V2B(59)2



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#### RECOMMENDED TOOLS FOR INSTALLATION





#### 1) Mounting Indoor & Outdoor Units and Running Piping/Wiring

Ruler (Not Shown)

Stud-Finder

Dry-Wall Saw

Electric Drill

3" Hole Saw **Drill Extension** 

Hammer Drill and Bit (Not Shown)

Measuring Tape

Level

Flash Light

Screw Driver (Phillps and Flat)

Hammer

Knife

Scissors

Goggled Glass

Mask Gloves

Ladder

#### 2) Refrigeration Related Work

Flat Surface Wrentch (Two) Flare-Nut Tool Set (Not Shown) Hex Head Key Set
Torch for AC Application (Not Shown)
Heat Absorbtion Flux Nitrogen (Not Shown) Soap Bubble (Not Shown) Vacuum Pump Helium Leakage Check (Not Shown)

#### 3) Electrical Related Installation

Wire Cutter Wire Stripper Sharp Plier Cable Ties Black Tape for Electrical Use lectrical Meter

#### 4) Trial Running Units and Inspection

Clamp Meter (Not Shown) Manifold Infra Thermometer (Not Shown)

# PART NAMES AND THEIR FUNCTIONS Side Panel **LED lights** Wrapping tape 1) POWER: On/Off system running/stop. Flashs when system falls in protection state. 2) COOL: On/Off the operation of cool ON/OFF. 3) HEAT: Lineset cover On/Off the operation of heat ON/OFF. Remote Control Refrigerant pipes and wires LINESET COVERS **ACAUTION** Not to damage line sets.





INSTALLER'S INSTRUCTION

# **INSTALLATION OF INDOOR UNIT**

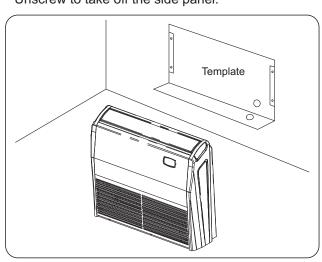
WARNING: The unit must be installated and maintained by licensed HVAC Technician.

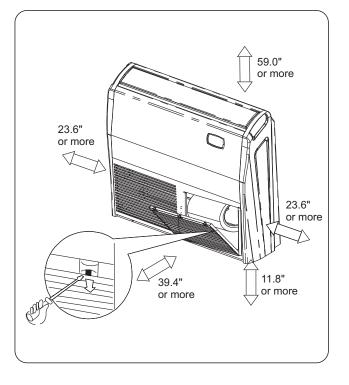
#### SELECTION OF INSTALLATION LOCATION

- \* Where cool air can be distributed throughout the room.
- \* Where condensation water is easily drained out.
- \* A place that can handle the weight of indoor unit.
- \* Not in laundry, nor in exhaust area.
- \* Where access for maintenance, is not blocked.

#### **INSTALLING LOCATION OPTIONS**

- \* Ceilina
- \* Floor (Against wall, or stand alone)
- \* Unlock the return air grille by pressing the locking latch shown at the right. Take out optional accessories and access to wiring terminal.
- \* Unscrew to take off the side panel.





**CAUTIONS-NOT INSTALL UNIT AT** 

\* Where there is high levels of acid or acidity exists.

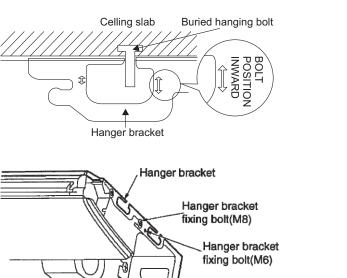
\* Where there is too much of in the area.

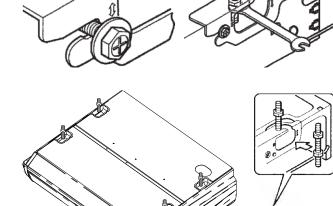
\* Where there is electrical supply.

#### **HANGING**

In the case of ceiling hanging installation, there is no need to remove hanger bracket from the indoor unit.

#### Illustration as follows:





# **REFRIGERANT PIPING WORK**

Select gas and liquid copper pipes per the following table.

MODEL	LIQOLID PIPE	GAS PIPE
WMMS-09EU-V2B(59)	1/4"	3/8"
WMMS-12EU-V2B(59)	1/4"	1/2"
WMMS-18EU-V2B(59)	1/4"	1/2"
WMMS-24EU-V2B(59)	1/4"	5/8"

Gas pipe and liquid pipe insulation must be no less than 3/8".

To keep dust and moisture out, both ends of copper pipe must be fully covered, before putting insulation on and coiling it.

Heat insulation layer Connecting wire Heat insulation layer Liquid pipe Pipe wrapping tape Dia. drain pipe 1/2"

In field installation, must check and keep the two ends of each copper pipe fully covered, to protect against any foreign substances potentially entering the pipe and contaminating the refrigerant system.

In selecting pipe running path, need to avoid as many bends as possible. If it is necessary, the bending radius must be more than 1.5" or 2".

#### Connecting indoor unit

- \* Before connecting indoor unit, need to check if the indoor unit seals well. Dry nitrogen is loaded inside the indoor unit before being packed at factory. If you hear the nitrogen gas blasting out of the broken seal, that means the indoor unit is sealed. Otherwise, need to recharge with nitrogen and recheck. If you still don't hear any noise, that means there is leaking somewhere inside the indoor unit. Could use soap bubble or helium detector to find the leaking points. You must fix the leaking point before recycling. Only mount the indoor unit after the indoor unit has passed a leak check. It will not be easy to fix the leaking, after the indoor unit is hung and connected. Better to find and fix the leaking points before hanging and connecting it.
- \* Connect the inter connecting pipes to the indoor unit following general refrigeration piping practices.

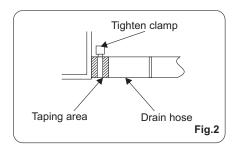
# **DRAIN PIPING WORK**

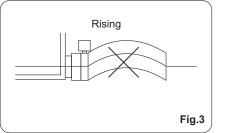
(When drain hose is connected)

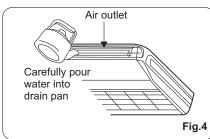
# **A** CAUTION

#### **Drain piping**

- \* The drain pipe connection can be either on the right rear or right side.
- \* The inside diameter of the drain pipe should be equal to or slightly bigger than the outside diameter of the connecting pipe.
- \* Keep the drain pipe as short as possible and incline downwards at a gradient of at least 1/100 to prevent air pockets.
- \* Use the drain hose and clamp that come with the indoor unit. Insert the drain hose completely into the drain connector on the indoor unit. Tighten the clamp (Fig.2, 3).
- \* Not to fold drain hose (Fig.3).
- \*Wrap the sealing pad over the clamp and drain insulate to hose.







Incline the drain hose

Not to be lifted

Not to be soaking in

Fig.1

No folding

# Check for smooth drainage after the piping work is done

\* Pour water into the drain pan from the air outlet to check for smooth drainage (Fig.4).





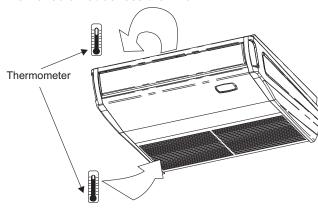
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INSTRUCTION

# **TEST RUNNING**

# EVALUATION OF THE PERFORMANCE

- \* Check voltage.
- \* Use a thermometer to measure cool air both in and out.
- \* The temperature difference between in-air and outair should not be less than 16°F.



# ACCESSORIES (CHECK FOR ALL ACCESSORY PARTS PRIOR TO THE INSTALLATION)

No.	Name	Picture	Qty	Specification
1	Outdoor drain elbow	000C##	1	
2	Outdoor drain stem	0	1	
3	Paper pattern for installaition		1	
4	Remote controller		1	
5	Battery	<b>1</b> )+ -	2	AAA 1.5V
6	Power connection cord		1	H05RN-F 4G1.0

Be sure to use the factory provided accessories list above in the installation. or it may lead to water leakage, electric shock, fire, etc.

#### **ROUTINE CHECK AFTER INSTALLATION**

#### CHECK AFTER INSTALLATION IS COMPLETED

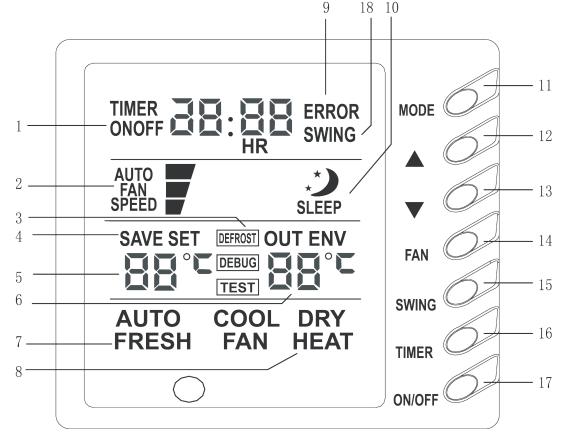
Items to be checked	Possible malfunction or problem
Screws are tightened firmly?	The unit may shake or make noise.
Refrigerant leakage test?	Insufficient refrigerating capacity.
Pipe insulation (thick enough)?	Condensate dripping.
Drainage flow is unusual?	Condensate dripping.
The incoming voltage (in accordance with the rated voltage marked on the nameplate)?	Electric malfunction or damage to the part.
Electrical wiring and piping connection (installed correctly and securely)?	Electric malfunction or damage the part.
Grounding connected well or not?	Electrical leakage.
Is the Power cable the right type and size providing a good protection and connection?	Electric malfunction or damage to the part.
Inlet and outlet been restricted/blocked?	Insufficient capacity.
Length of connection pipes and the refrigerant charge adjusted, matched?	Insufficient cooling or heating, damage to parts/unit.

# **OPTIONAL WALL MOUNT CONTROL (NOT REGULAR THERMOSTAT)**



# NOTE:

- 1. Never install the wire controller in a place where is water leakage.
- 2. Avoid bumping, throwing, tossing or frequently opening the wire controller.



Composition of wire conrtoller

1	Timer display			
2	Fan speed display (Auto, High, Middle)			
3	Defrosting display			
4	Saving state display			
5	Set temp. display			
6	Ambient temp. display			
7	Fresh air display			
8	Mode (COOL, DRY, FAN, HEAT, AUTO)			
9	9 Malfunction display			

10	Sleep display
11	MODE button
12	Button for temp. increase
13	Button for temp. decrease
14	FAN button
15	SWING button
16	TIME button
17	ON/OFF button
18	Display of swing state

# ABOUT MODE CLASH/CONFLICT BETWEEN INDOOR UNITS

If any two indoor units are controlled to run the following modes, indoor unit will run into mode clash or conflict. All indoor units will stop to run and show Protection/Error code E7, unless shut-off and then re-power:

Some on HEAT Mode, while others on COOL Mode and/or DRY(Dehumidify) Mode and/or FAN Mode.

#### NOTE:

COOL mode is compatible with DRY and FAN mode. In other words, there will be no problem for some indoor units to run COOL, while others may run either one or few of modes COOL, DRY (Dehumidifying) and FAN. No Protection/Error code will show up.



**UNIT OPERATION** 



# **REMOTE CONTROL-BUTTON NAME & FUNCTIONS**

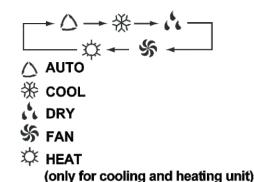
**NOTE1:** This is a general use remote control and can be used for numerous air conditioner styles and models. There may be some buttons on the remote that are not for use with the unit purchased. When these buttons are pressed you may hear a beep sound emitted from the remote. This will not affect the unit staus.

**NOTE2:** Be sure there are no obstructions between the indoor unit and the remote control. Do not drop or allow any liquids near the remote. Do not place the remote in direct sunlight or any place that can become very hot.



"ON/OFF" BUTTON: Press this button to turn the unit on. Press once more to turn the unit off. When turning the unit ON/OFF, the TIMER, and SLEEP functions will be canceled. The preset time will remain.

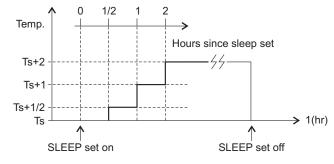
**"MODE" BUTTON:** By pressing this button you can choose what mode you would like the unit to run in. When the remote is first turned on the mode displayed will be the AUTO mode. The temperature cannot be adjusted in this mode and will not display on the indoor unit. This is a factory preset temperature of 78°F. Under HEAT mode the initial set temp will be 82°F (28°C). Under other mode the initial set temp will be 77°F (25°C).



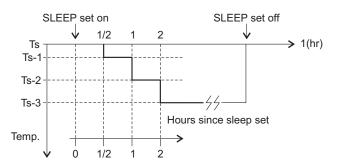
"SLEEP" BUTTON: This function will increase or decrease the set temp depending on what mode the unit is running in. When SLEEP mode is turned on in cooling mode the temp will automatically increase 0.5 to 1.0 degree once every half to one hour for several times over a period of 2 hours and remain at that temperature until SLEEP mode is turned off. When SLEEP mode is turned on in heating mode the set temp will automatically decrease 0.5 to 1.0 degree once every half to one hour for several times over a period of 2 hours and remain at that temperature until SLEEP mode is turned off. This way when the unit is SLEEP mode during cooling the fan will blow at a lower speed to accommodate for the decreased cooling load due to less activity and a lower outdoor temp. The same principle of savings is applied to heat mode.

To activate the sleep mode press the SLEEP button once. You will see a picture of a moon and stars in the lower left hand corner. To turn off the SLEEP mode simply press the button once more and the moon and stars will disappear from the remote screen.

#### The COOL mode SLEEP profile is as follows:



#### The HEAT mode SLEEP profile is as follows:



# **REMOTE CONTROL-BUTTON NAME & FUNCTIONS**

"FAN" BUTTON: By pressing this button you can select from fan speeds AUTO→Low→Middle→High. When the unit is first powered on the default fan speed setting is AUTO. When running the unit in DRY mode the fan speed will only run in low speed.



**Note:** Under the Dry mode, the fan speed isn't adjustable, low fan speed is imperative.

"CLOCK" BUTTON: The time function runs on a 24 hour clock. To set the time press the clock button once. You will see a flashing clock appear on the remote. Press the "+" button to increase the time; press the "-" button to decrease the time until the desired time is set. Press the clock button once more to set the time. You will notice then, the clock symbol is not flashing.

"LIGHT" BUTTON: This allows you to turn the indoor unit display light on and off. If the light emitted by the display is bothersome simply press the LIGHT button on the remote and the display will turn off. To turn the display back on simply press the light button once more.

**"BLOW" BUTTON:** When the blow function is on a symbol on the remote will appear next to left hand corner of the temp. This feature when turned on, will allow the indoor fan to continue to blow even when the unit is turned off by the remote. This will aid in the quick drying of the indoor coil to help prevent any kind of mold build up due to moisture. To turn this feature off simply press the BLOW button once more till you notice the blow icon disappear from the remote display.

**"TURBO" BUTTON:** When you press this button you will see a symbol of a fan appear on the remote. In either heat or cooling mode when this button is pushed the compressor and or fan will blow at a higher speed to achieve set temp quicker. When the indoor unit senses that the set temp is being approached the fan speed will slow down. To turn this function off simply press the TURBO button until the fan symbol is no longer displayed on the remote.

"+" Button: By pressing this button the set temp will increase. If this button is pushed without releasing for over 2 seconds the temperature will increase more rapidly. In AUTO mode the temperature cannot be changed. The temperature range for this remote is 61°F to 86°F.

**"-" Button:** By pressing this button the set temp will decrease. If this button is pushed without releasing for over 2 seconds the temperature will decrease more rapidly. In AUTO mode the temperature cannot be changed. The temperature range for this remote is 61°F to 86°F.

**"TEMP" Button:** When the unit is first turned on the remote will display the last set temp. When the TEMP button is pushed twice the indoor unit will display the room temp for approximately 5 seconds before going back to the set temp.

**TO LOCK THE REMOTE:** If you would like to lock the remote from anyone changing the settings simply press the "+" and the "-" buttons simultaneously. When the remote is locked you will see an icon of a lock appear on the remote. If while the remote is locked and someone pushes a button on the remote they will see the icon of the remote flash three times. This indicates the remote is locked. To unlock the remote simply press the "-" and the "+" once more. You will know the remote is unlocked once the icon of the lock disappears from the remote screen.

**SWITCH BETWEEN F° AND C°:** The remote default is Fahrenheit. If you would like to switch between the remote displaying Fahrenheit and Celsius the MODE and the "-" button simultaneously while the unit is turned off.

"TIMER ON" BUTTON: This button allows you to set a time you would like the unit to turn on. The clock is a 24 hour clock. Press the TIMER ON button once and you will see the word "on" flashing next to a time displayed. By pressing either the + or the - button choose the time you would like the unit to turn on. Once you have the desired time displayed on the remote press the TIMER ON button once more and the word ON will stop blinking and stay on the remote. The time you would like the unit to turn on is now set.

"TIMER OFF" BUTTON: This allows you to set the time that you would like the unit to shut off. Simply follow the above steps but this time press the TIMER OFF button instead of the TIMER ON button. When the word OFF is set on the remote screen, the time you would like the unit to turn off is now set.





**UNIT OPERATION** 

# **REMOTE CONTROL-BUTTON NAME & FUNCTIONS**

"SWING" BUTTON: Hold the swing button (symbol shown above) for more than 2 seconds and the indoor air louver will start to swing between the highest and lowest limits. Once the swing button is released the louver will stay in the last position where the button was released.

If the swing button is pushed just once the swing icon will appear on the remote and the louver will swing up and down continuously between the highest and lowest points. Push the swing button once more and the icon will disappear on the remote and the louver will remain at the last point the button was pushed. When the unit is powered off by the remote the louver will close on the indoor unit.

Press this button to set up the desired swing angle which circularly changes as below.

# **NEW NOTION : SWING UP AND DOWN" BUTTON**

Press this button, to set up swing angle, which circularly changes as below:

This is an universal use remote control. If remote control sends the following three kinds of status that the swing status of main unit will be:

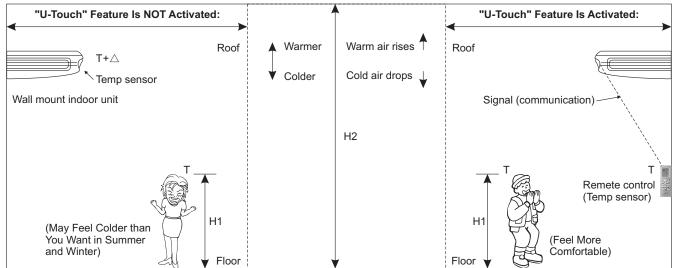
When the guide louver start to swing up and down, if turn off the Swing, the air guide louver will stop at current position.

which indicates the guide louver swings up and down between that all five positions.

"U-TOUCH" BUTTON: Since the indoor unit is normally mounted high up on the wall or attached to the ceiling, the temperature at where the return air sensor is installed inside the indoor unit is higher than what it is where the area people stand and can feel (4 to 7 feet above the floor). If the unit uses the return air temperature as its target control, people may feel colder than what they really want (target) in both cooling mode and heating mode. The facts of air stratification and warm air rising and cold air dropping require users to set up, by experiments or experience, the target temperature quite few degrees higher than what you really want, in order to reach a satisfied or more precise indoor comfort. This is a common drawback of AC/HP units made by other manufacturers. With YMGI's U-touch feature, this can be avoided and your comfort level can be improved. When you press the U-TOUCH button on the remote control, the unit will use the temperature where the remote

is located as its target temperature control. Once you do so, you will notice a figure of a person surrounded by stars appear on the remote.

Once the U-TOUCH stars appear, the remote will send a signal of the remote-local temperature to the indoor unit, and this remote-local temperature will supersede the return air temperature as the unit's target temperature. Every 10 minutes such signal will be sent from the remote to the indoor unit updating the remote-local temperature. If at any time during this process no signal is received by the indoor unit from the remote, the unit will switch back to the previously set temperature before the U-TOUCH feature is activated. To turn the U-TOUCH feature off, simply press the U-TOUCH button until you see the symbol disappear from the remote screen. By doing so, the return air temperature will take place of remote-local temperature as the unit's target temperature. U-TOUCH is what YOU WANT. U-TOUCH feature brings to you a true comfort level wherever and whenever you want.



# **REMOTE CONTROL-BUTTON NAME & FUNCTIONS**

#### SYMBOL DISPLAY

When power is first applied to the unit but the power has not been turned on by the remote control, then the red power light only is displayed. When the unit has been powered on by the remote control then the running LED is lit and the current running mode symbol is displayed at the same time.

**COOLING:** Running symbol and cooling symbol are lit. **HEATING:** Running lamp and heating symbol are lit.

**DRY:** Running lamp and dry lamp are lit FAN: Running lamp and fan lamp are lit

**AUTO:** Auto lamp, running lamp and actual running mode are lit.

#### **ALPHA NUMERIC DISPLAY**

- \* The setting temperature range for the unit is 61° to 86°F.
- \* Under AUTO mode unit will display 77°F for cooling and 68°F for heating modes.

# **MAINTENANCE**

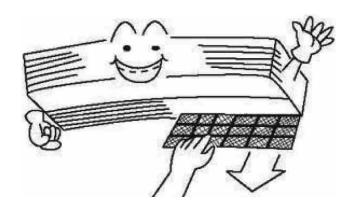
# **A** WARNING

Before inspection and maintenance of the unit, always set the power switch to "OFF" to cut off the power supply.

#### **CLEANING THE AIR FILTERS**

# **A** WARNING

The air filter must be cleaned by profressional.



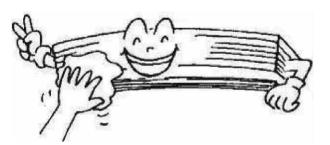
#### AT THE START OF THE SEASON

- \* Check that nothing blocks the air inlet and outlet of the indoor and outdoor units.
- \* Running the unit without air filters can cause malfunctions due to dirt or dust. Always install air filters at all times.
- \* Check that drainage hose is not bent or clogged.
- \* Check that the units are properly installed.

#### **CLEANING THE UNIT THE ENCLOSURE**

Clean the enclosure of the air conditioner and the remote control with dry cloth or a vacuum cleaner. If damp cloth is used, remove molsture by using dry cloth afterward.

- \* Do not use benzine gasoline, thinners or polishing products for cleaning.
- \* Do not wash with hot water(above 104°F), Some parts of the unit may be deformed.



#### **DURING THE OFF SEASON**

- \* Cut off the power supply main switch.
- \* Clean the enclosure.
- \* Leave the fan running for 2-3 hours to dry out the inside of the unit.



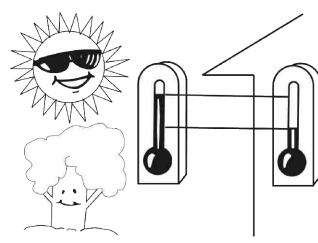


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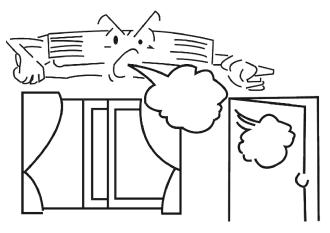
**UNIT OPERATION** 

# **OPERATING GUIDE**

\* The temperature should not be set lower than what you need. This would lead to increase energy cost.



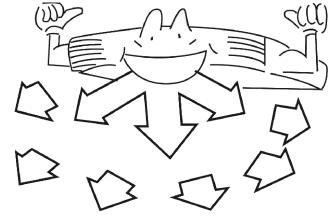
\* Close window and door while operating the unit to prevent leakage of cooled air and save energy.



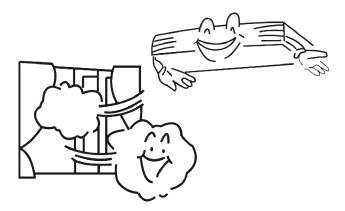
Draw close curtains or close glass windows when cooling to prevent heat load from sun light which may cause more electricity cost.



\* To distribute cool air throughout the room, adjust air flow directions shown by the arrows (see picture)to diffuse cool air.

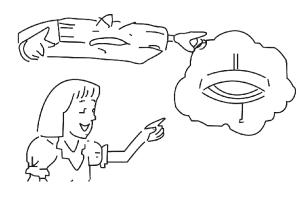


In case of ineffective ventilation, open the window to ventilate the room air once in a while but not too long since cooled air will be uselessly drained out.



# **PRECAUTIONS**

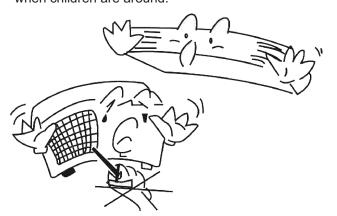
Turn off the air conditioner if, while running, electricity interference occurs, if the unit is not to be used for a long time, cut off the power supply main switch.



Do not channel the air flow directly at people, especially infants, aged persons, or patients.



Do not insert objects into the air inlet or outlet when the air conditioner is running as it may cause damage or personal injury. Also pay special attention when children are around.



Do not locate any obstacle against the air flow direction of indoor and outdoor unit. Inefficient performance or malfunction may result.



Do not locate a heater or any other heat source close to the unit. The heat may deform plastic parts.



# **A** WARNING

The appliance should not be used by children without supervision.



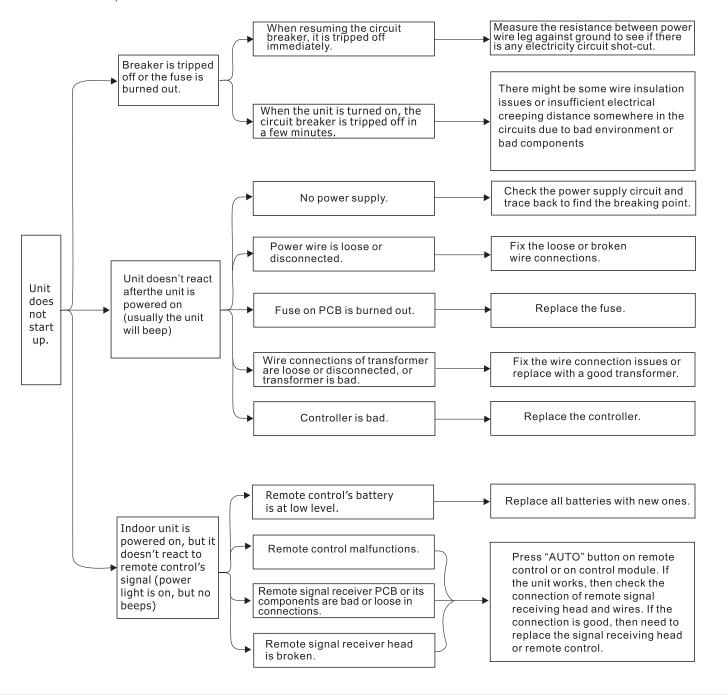


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# CHECKING UNITS PRIOR TO CONTACTING YOUR TECHNICIAN

#### **GENERAL PROCEDURES**

- 1) Preparation before maintenance
- Step 1: Firstly, confirm the model of the inverter A/C which needs repairing, and then find out model of main parts that can be damaged easily and the material encode, especially the controller of outdoor unit;
- Step 2: Basing on the malfunction phenomenon reflected by user, judge the parts which needs for replacing initially, and bring those parts with you for maintenance.
- Step 3: As for repairing the inverter A/C, you should not only bring the common tools, such as screwdriver, wrench, etc, but also you should bring universal meter and ammeter with you.
- 2) During the maintenance, don't touch any terminals before the voltage between P and N of power module is measured less than 50V to avoid electric shock.
- 3) Before or after the maintenance, you should check whether the users' power socket, terminal block on indoor/ outdoor unit and all connectors on main board (especially the main board of outdoor unit, power module and PFC module) are loosened or not.



# PROTECTION AND ERROR CODES

No.	Meaning	LED (Red)	LED (Yellow)	LED (Green)	LED (88)
1	Compressor high pressure protection-unit stops	Blink once			E1
2	Indoor unit anti-freezing protection	Twice			E2
3	Low-pressure protection-unit stops	Three times			E3
4	Air exhaust protection-unit stops	Four times			E4
5	Over current protection-unit stops	Five times			E5
6	Communication malfunction-unit stops	Six times			E6
7	Unit modes conflict	Seven times			E7
8	Jumper malfunction	fifteen times			C5
9	9 Defrosting /Heating oil return		Blink once		H1
10	Compressor overload protection-unit stops		Three times		НЗ
11	System Unit malfunction		Four times		H4
12	IPM modular protection-unit stops		Five times		H5
13	PFC protection-unit stops		Six times		HC
14	Compressor malfunction		Seven times		
15	Water spill protection		Eight times		
16	Indoor ambient temp. sensor malfunction			Blink once	F1
17	Indoor pipe temp. sensor malfunction			Twice	F2
18	Outdoor ambient temp. sensor malfunction			Three times	F3
19	Outdoor pipe temp. sensor malfunction			Four times	F4
20	Outdoor air exhaust temp. sensor malfunction			Five times	F5
21	E2 PROM Error			Eleven times	HA
22	Wire controller ambient temp. sensor malfunction			Blink once	

#### When the unit is controlled by cabled controller, fault indication and error displays

Fault code	Meaning	Error code display
1	Compressor high pressure protection unit stop	E1
2	Indoor unit anti-freezing protection	E2
3	Low-pressure protection unit stop	E3
4	Air exhaust protection unit stop	E4
5	Over current protection unit stop	E5
6	Communication malfunction unit stop	E6
7	Unit modes conflict	E3
8	Jumper malfunction	E3
9	Defrosting /Heating oil return	defrost
10	Compressor overload protection unit stop	E5
11	System Unit malfunction	F2
12	IPM modular protection unit stop	E5
13	PFC protection unit stop	E5
14	Compressor malfunction	E9
15	Water spill protection	E9
16	Indoor ambient temp. sensor malfunction	F0
17	Indoor pipe temp. sensor malfunction	F1
18	Outdoor ambient temp. sensor malfunction	F3
19	Outdoor pipe temp. sensor malfunction	F2
20	Outdoor air exhaust temp. sensor malfunction	F4
21	E2 PROM Error	E3
22	Wire controller ambient temp. sensor malfunction	F5

YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World!



UNIT MAINTENANCE & SERVICE GUIDE



# PROTECTION AND ERROR CODES

# **Protection and Error Code List - Summary**

No.	Protection and Error Code Name	Red light (running LED)	Yellow light (heating LED)	Green light (cooling LED)	Floor ceiling dual 8	Display of wired controller	Display of wired controller for duct type unit
1	High pressure protection of system	Blink once			E1	Yes	E1
2	Antifreezing	Blink twice			E2	Yes	E2
3	Low pressure protection of system	Blink 3 times			E3	Yes	E3
4	Discharge protection	Blink 4 times			E4	Yes	E4
5	Low voltage overcurrent protection	Blink 5 times			E5	No	E1
6	Communication malfunction	Blink 6 times			E6	Yes	E6
7	Mode shock	Blink 7 times			E7	No	E2
8	Malfunction of jumper cap	Blink 15 times			C5	No	E3
9	Defrosting/heating oil return		Blink once		H1	Yes	Defrost
10	Overload protection of comrpessor		Blink 3 times		НЗ	Yes	E5
11	System is abnormal		Blink 4 times		H4	No	F4
12	Module protection		Blink 5 times		H5	No	E3
13	PFC protection		Blink 6 times		HC	No	E5
14	Out-of-step malfunction of compressor including erase malfunction		Blink 7 times		H7	No	H8
15	Water overflow protection		Blink 8 times		Н8	Yes	H8
16	Indoor ambient temperature sensor is open circuit or short circuit			Blink once	F1	Yes	F0
17	Indoor evaporator temperature sensor is open circuit or short circuit		Blink 5 times	Blink twice	F2	Yes	F1
18	Outdoor ambient temperature sensor is open circuit or short circuit			Blink 3 times	F3	Yes	F3
19	Outdoor condenser temperature sensor is open circuit or short circuit			Blink 4 times	F4	Yes	F2
20	Discharge temperature sensor is open circuit or short circuit			Blink 5 times	F5	Yes	F4
21	The reserved outdoor unit displays E2			Blink 11times	НА	No	No
22	Malfunction of ambient temperature sensor on wire controller			or ambient temper nsor (Green light:		Yes	F5
$\overline{}$							

When there's malfunction or protection for A/C, the display screen of indoor unit or LED will display corresponding code and LED on main board of outdoor unit will also have warnings. Please refer to the function parts as before for details. When protection or malfunction has been eliminated, the display will resume normal status.

# TROUBLE-SHOOTING GUIDE

		Indicator		Dual 8 nixietube	Wire controller		
No	Malfunction name	Red light (running LED)	Yellow light (heating LED)	Green light (cooling LED)	Dual 8 for floor ceiling unit	Wire controller display method for duct type unit	Troubleshooting method
1	Malfunction of jumper cap	Blink 15 times			C5	E3	The jumper cap at the place of silk screen CN1 on main board of indoor unit has malfunction. Please check or replace the main board of indoor unit.
2	Water overflow protection		Blink 8 times		Н8	H8	There's connecting problem at the place of silk screen WATER-D on main board or there's problem for the water overflow inspection device, please check or replace it.
3	Indoor ambient temperature sensor is open circuit or short circuit			Blink once	F1	F0	The temperature sensor at the place of silk screen ROOM on indoor main board has malfunction, please check or replace it.
4	Indoor evaporator temperature sensor is open circuit or short circuit			Blink twice	F2	F1	The temperature sensor at the place of silk screen TUBE or TUBE-I or TUBE-O on indoor main board has malfunction, please check or replace it.
5	Malfunction of ambient temperature sensor on wire controller	Display the malfunction of indoor ambient temperature sensor when using this temperature sensor. (Green light: blink once)				F5	Replace the wire controller.

- 1) As for cassette type, floor standing type indoor unit, wire controller is optional. If the unit hasn't been equipped with the wire controller, there's no display malfunction for wire controller.
- 2) Cassette type unit only has 3 indicators, no dual 8 display.
- 3) Only the cassette type is with the malfunction of water overflow protection. Floor ceiling type and duct type indoor fans are without this kind of malfunction.





UNIT MAINTENANCE & SERVICE GUIDE

# MUST READ-2

#### **CUSTOMER AND TECHNICIAN MUST READ**

# WHY DOES YMGI GROUP REQUIRE INSTALLATION AND SERVICE TO BE 100% PERFORMED BY LICENSED OR CERTIFIED HVAC TECHNICIAN/CONTRACTOR?

- 1) They have the training and experience to accurately and safely install and service your equipment.

  The equipment runs with high-pressure refrigerant and oil and line-voltage. The copper lines must be installed properly to prevent leakage and foreign substances from contaminating the refrigerant system.
- 2) You will save money in the long run. If any problems occur on the unit that is fully installed by the licensed or certified contractor, they have the training and experience to correct the problem more efficiently. A technician(s) may be unwilling to repair an issue on a unit that they did not install. If you do find a technician willing to perform the service, there is an increased possibility of higher service fees than normal, increased service visits, or delayed service from that technician.

#### 3) It's the law!

The federal, state and/or local government and authorities have various governing laws or regulations, guidelines, ordinances, etc., requiring only licensed or certified professionals can install and service high pressure HVAC equipment.

#### SUGGESTIONS, TO AID YOU IN HIRING AN HVAC CONTRACTOR:

- 1) Hire a currently, practicing, licensed/ certified HVAC technician/ contractor. Technicians, who are no longer practicing (retired, etc.) in this field, may not have the updated knowledge or may lack experience on the equipment you have purchased.
- 2) Hire a technician/ contractor who services customers in your local area and you are familiar with. Local contractors have a faster response time and will be easier for you to determine if they are reputable.
- 3) Use only reputable licensed/ certified HVAC installation contractors/ technicians to prevent any unexpected charges as a result from unethical business practices.
- 4) Check their references, to verify they are a good service provider to the general customers. N.A.T.E or A.C.C.A certified technicians are strongly recommended.
- 5) Some contractors/ technicians may not feel comfortable about installing the equipment that you purchased for them to install, and they prefer to purchase and install the equipment. You can contact YMGI directly to check and see if there have been any contractors in your area who have installed our products or similar.
- 6) Ask for a detailed quote for the whole installation project. A flat rate quote is the safest contract for both you and the contractor
- 7) Your local HVAC technicians may charge you on a project basis or on an hourly basis. To our general knowledge and experience, <u>a full single head installation may normally cost anywhere from \$800 to</u> \$1500. These costs are estimates and your actual costs may differ due to job nature and location.
- 8) Number of hours can vary depending upon each individual situation, some factors are, but not limited to:
- 9) How difficult or complex the indoor unit is to be securely installed.
- 10) How difficult or how long the inter-connecting pipes and wires are to be installed.

# **CUSTOMER AND TECHNICIAN MUST READ**

- 11) If all the suggestions have been taken and all the necessary steps are followed.
- 12) If the contractor(s)/technician(s) are experienced with the systems/brands you purchase. You might spend less. But remember, many times you get what you pay for.
- 13) Sign a contract with them. The contract should list all the detailed work they will conduct and the standards they will follow. Some contractors are willing to include a 1-year installation/service warranty at no extra charge. Check with them to see if that is available. If available, include that in the contract.
- 14) Verify and confirm the installation is done completely and all the unit functions have been checked and are working properly, all the items in the checklist have been checked and marked well in the warranty registration card/form, prior to paying the contractor in full.

The cost of not having your unit installed properly can be more expensive than spending a little extra money that hiring the right contractor will cost. Protect your investment and warranty eligibility by doing it right first time.

# UPON PURCHASING, OPENING PACKING BOXES AND INSTALLATION OF YMGI UNITS/ACCESSORIES, YOU AND TECHNICIANS YOU HIRE TO INSTALL THEM ARE ASSUMED TO HAVE READ ALL MATERIALS AND AGREE TO FOLLOW AND BE BONDED BY ALL WE SAY IN YMGI MANUALS.

- 1) You understand all that is written hereafter in this and other documents that we publish.
- 2) You will follow what is written hereafter in this and other documents that we publish.
- 3) You will be bound by and completely follow all policies, guidelines, instructions, warnings, attentions and other materials, as published by YMGI Group, its subsidiaries or sister companies, in writing.
- 4) Only a successful installation, fully (100%) conducted by a qualified HVAC technician(s), as detailed in the checklist of the **Limited Product Warranty Policy** and **Limited Product Warranty Registration Card/Form**, along with a properly detailed installation invoice, is eligible for the **Limited Product Warranty**.
- 5) Failure to follow what is written hereafter may cause various equipment issues that you will take full responsibility and liability for, including, but not limited to, losing manufacturer's warranty, unit not working properly, unit malfunctions, under-performance, decreased safety, increased potential of various damages to your property, body, home and/or business, etc.
- 6) YMGI documents and policies supersede those made or provided by the sales distributors or installing contractors. YMGI Group maintains the final authority in explaining and resolving any and all discrepancies that might exist between distributors/contractors' documents and ours.

#### YMGI STRONGLY RECOMMENDS:

- \* Customer hires a currently licensed/ certified HVAC technician(s) (N.A.T.E. or A.C.C.A certification is strongly recommended) to conduct 100% of the installation, inspection of all unit functions and repair service.
- \* Customer signs an installation/service contract with the installation/service technician's company who has good service references and you trust. Installation and service is very important to the life of your investment and provide you a lifetime of comfort and peace of mind.
- \* Customer requests the installer to put down a1-year labor warranty coverage in the installation contract.
- \* Have the technician check against all the items in the checklist of the **Limited Product Warranty Registration Card/Form**, sign and date it, to help ensure a proper and professional installation.
- \* Customer pays in full, only after all the unit functions are inspected, the unit works properly, warranty checklist is fully filled out and signed and you are fully satisfied.
- \* If any unit abnormality is found, have your technician check the unit first. Have them call for manufacturer technical assistance, if necessary, from your job site, not his office, so that we can more accurately assist him in diagnosing the cause of the malfunction.

# QUESTIONS ABOUT SELF-INSTALLATION VS HIRING LICENSED HVAC TECHNICIANS

Does YMGI allow to do-it-yourself installations (DIY) partially or fully? NO.

Unfortunately no brand or manufacturer can take the responsibility of the equipment if it is not professionally installed by a currently licensed HVAC technician/ contractor.

If unit is installed by non-licensed people, in part or fully, will the factory warranty be void? YES.





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# Some DIY installations have been successful, but these are exceptions. Most have resulted in equipment failure, due to lack of knowledge and experience. A few of the problems result from DIY's lack of knowledge in the following areas:

- \* Sizing and selecting correct type, size and model of cooling and/or heating equipment.
- \* Sizing and installing correct electric circuit breakers and wires.
- \* Wiring the units correctly and properly.
- \* Taping the ends, connecting to indoor and outdoor units correctly and properly.
- \* Vacuuming the inter-connecting refrigerant lines.
- \* Checking and/or fixing the refrigerant leaks.
- \* Checking and/or fixing the condensate drain leaks.
- \* Releasing the refrigerant from outdoor unit to indoor unit.
- \* Running the unit to check all the unit functions.
- \* Conducting the installation or trouble-shooting with correct tools, experience or professional knowledge to correct the problem.

#### RECEIVING AND FREIGHT DAMAGE

- \* Freight (package/unit) shall be checked thoroughly for damage at receiving before accepting by signing on the carrier's delivery paperwork.
- \* Upon shipment being signed for acceptance, it becomes a binding document as to the condition of the products on delivery. We cannot process any shipping damage claim, if you accept the delivery.
- \* If damage is found at delivery, both you and the delivery driver must make notes on the delivery receipt or other freight paperwork detailing the damage found by marking position/parts on unit, description of damage, time/date, your name, contact phone, etc. on the delivery documents. Make a copy of the marked delivery receipt.
- \* If the damage is minor or partial, that you choose to accept, you can contact the distributor or YMGI to discuss the possible replacement of the damaged part.
- \* If refusal of the shipment is needed due to severe freight damage, **DO NOT** sign the carrier's delivery receipt document indicating that you accept the products. Mark receipt "REFUSED DUE TO FREIGHT DAMAGE." Sign and date along with the delivery driver's signature and date.
- \* Take pictures showing the damage, before the delivery driver leaves.
- \* If you accept the delivery or fail to note damage on the driver's delivery receipt, the ability to claim freight damage is lost and YMGI will not replace the unit on this basis.
- \* Contact the distributor or YMGI, report the damage by forwarding the marked delivery receipt copy and pictures.
- \* Only after YMGI verifies with the carrier the necessary detailed notes of received freight damage, will the damaged products be eligible for replacement.
- \* If the returned products are found not damaged, YMGI will treat it as a return and will charge you 25% of product value plus added shipping cost.

# RETURN-YMGI GROUP POLICIES & RETURN GOODS AUTHORIZATION (RGA)

All sales are final. If the customer wishes to return a product, the following **Return Policies** apply.

- A. Only those products (units, parts or accessories) under the following conditions, are eligible for return:
- 1) Products are returned within 30 days of their original shipment date from YMGI
- 2) Products have not been installed.
- 3) No damage exists on the products being returned.
- 4) No missing products.
- 5) Products and packages are clean.
- 6) No duct tape or marking on the product or box.
- 7) Products are still their original package, in good shape and in re-sellable condition, as YMGI determines.

#### B. Preapproval steps for your return request:

- 1) Contact your distributor or YMGI to request a return.
- 2) Photograph your product and box to show details
- 3) YMGI will review your request, along with the pictures and any other details pertaining to your request.
- 4) If YMGI agrees to process your return request, a form called <u>Return Goods Authorization (RGA), along with an assigned RGA #</u> will be forwarded to your distributor or you.
- 5) Any return without YMGI Group approved RGA#, will not be accepted.

# **CUSTOMER AND TECHNICIAN MUST READ**

#### C. YMGI must verify the following before you can pack your products:

- 1) No products (units, parts, accessories) are missing.
- 2) No damage is found.
- 3) The products are in the original packaging.
- 4) No duct tape on any product or box.
- 5) Pictures have been taken and sent to YMGI to verify the product and boxes are not damaged.
- 6) The RGA has been completed and a copy has been returned to YMGI, via email or fax.
- 7) YMGI has approved the request in writing.

#### D. Shipping Preparation:

- 1) Package all products in a manner in which no damage can occur to the product and secure to a pallet.
- 2) Take and forward pictures of packed pallets for YMGI to verify proper packaging and no existing damage.
- 3) Include the YMGI approved RGA# in the shipping documents.
- 4) YMGI reserves the right to approve or deny any shipments.
- 5) YMGI can arrange shipping for you, but not at YMGI's cost. If this option is chosen, a packing list and BOL will be issued to you through YMGI.
- 6) If the above option is not chosen, you will be responsible for all freight charges. YMGI will not accept any returned items COD.
- 7) Place the package in an area which is accessible to the shipping company for pickup and limits the possibility of damage to the product. Customer must be present at the time of freight pick up.

After shipping, fax the BOL to YMGI Group at 1-866-377-3355 or email to <u>customerservice@ymgigroup.com</u>, detailing the information of the freight company and their tracking number.

#### E.Freight Damage:

- 1) YMGI Group will inspect returned items
- 2) Claiming of freight damage from a customer hired carrier will be the customer's responsibility.
- 3) Claiming of freight damage from a YMGI hired carrier will be YMGI's responsibility.

#### F. Charges for your return:

- 1)A restocking charge of 25% creditable invoice value.
- 2)All return shipping fees.
- 3)Additional fees will be charged, if products are found to be damaged, missing or used.
- 4)YMGI will notify the distributor of the charges only after the inspection and assessment of the returned products has been completed.

#### Attention:

- 1) Returned products must be shipped within 7 days of YMGI's releasing of RGA #.
- 2) All RGA shipping shall be prepaid by the customer. YMGI will not accept any COD freight.

#### YMGI GROUP DISCLAIMING-1:

YMGI Group will NOT accept any return, or may not honor 100% credit for any return of Product(s)/Part(s)/ Accessories, in any of the following cases:

- \* Return requests made 30 or more days after the date of original sales shipping from YMGI Group warehouse.
- \* Return shipment is initiated 8 days or more after the RGA is approved.
- \* Returned products received not displaying an YMGI-approved valid RGA #.
- \* Returned products received C.O.D.
- \* Returned products not received in the original packaging.
- \* Returned products received with non-repairable packaging, including duct tape or marks on units or carton boxes.
- \* Returned products received with missing units/parts/accessories.
- \* Returned products received, are found to be non-functional or damaged.

#### YMGI GROUP DISCLAIMING-2:

- \* YMGI Group will not be responsible for any losses of returned unit(s)/part(s)/accessories in transition to YMGI Group warehouse.
- \* YMGI Group RGA is valid for seven (7) days from the original issuing date. Returns will not be accepted, if shipping is made 8 or more days after the YMGI Group RGA is issued.





**MUST READ-2** 

# **CUSTOMER AND TECHNICIAN MUST READ**

#### DEFECTIVE UNITS / PARTS / ACCESSORIES-REPAIR OR REPLACEMENT

Out of thousands of units sold every year, there may be an occasional instance your product does not operate properly. Reasons of but are not limited to: manufacturing, installation, operation, maintenance and knowledge of operator.

Equipment failure does not automatically denote a product defect from the factory assembly line. The defects can be caused, during production, transportation, installation, operation, maintenance, or service. Defects may NOT be the responsibility of the manufacturer. Nobody willfully or intentionally produces a defective product. No determination shall be made until the technical issue(s) or the causes of the defect(s) are identified.

The defects might be found before/ during installation or in the operation of the unit. Defects can be in the form of blown fuse(s), defective control board(s), damaged remote control, loose or missing screws, etc. These defective parts can be replaced easily.

Some functions of our units are different from what are typical in traditional split type air conditioning and heat pump systems and similar systems made by other manufacturers. These are not defects. Take some time to learn the functions of your unit. We will be happy to assist you with any questions you may have concerning the functions of your new unit.

If a defect is found, whether at the original installation, or during normal operation, we will gladly help you in the following steps in sequence from 1 to 3:

- 1. Part repair or replacement after trouble-shooting: This is the most common and generally the easiest and most economical way for all the needed parts since the problem and all part needs can be accurately and completely identified.
- \* Your technician calls our technical support line, from your job site, after checking your units and getting all the information
- \* Our technical support will go through several steps, over the phone or through email, with your technician, in order to help identify and resolve the problems. Normally wiring correction, piping correction, part repair/ replacement will resolve the problems.
- \* Your technician will then need to verify and confirm the problem(s) before YMGI can ship out the replacement part(s). Inaccurate or incomplete troubleshooting or part replacement will delay the repair. YMGI technical support will only speak with a licensed/certified technician in regards to the repair of your unit. In our experience this saves time and money for all parties involved.

Your technician is the only person to perform any physical checking, trouble-shooting and replacing of any defective part(s) for your units. Our factory technical support is just a help. YMGI provides no labor warranty on the products.

- 2. Unit/part repair at our workshop(s): Due to the limitations of our technical support not being at your job site, or your technician's limited experience with our product, the problem may not be resolved as quickly as would be desired. If the problem is still not resolved after attempts between your technician and our technical support. you can elect to have the unit repaired at our facility. If this step is chosen:
- 1) YMGI will send to you the Customer Request to Ship Products to YMGI Service Center for Inspection and Repair, and Authorization to Charge form.
- 2) You will review the form and fill all fields appropriately, sign and send back to the YMGI Group.
- 3) Once the form has been completed and sent back to YMGI, remove the units and ship back to YMGI.

Please make a note describing the problem and communication history, if possible. Our technicians will check the units and find the problem(s), repair the issue(s), and ship the unit back to you following the conditions set forth in the signed repair agreement. All unit removal and re-installation is done at your cost and must be done by a currently valid licensed HVAC technician.

3. Unit replacement: Only applies to those defects reported within 30 days of original purchase date and if all necessary warranty paperwork had been received and approved. This option applies only if the above steps cannot resolve the problem(s). Either indoor or outdoor unit replacement is available, based on the actual need, at YMGI's determination. This option shall be the last resort, due to refrigerant and wiring considerations. All unit removal, re-installation and shipping cost are the responsibility of the customer. YMGI maintains the final authority as to unit replacement. Replacement will be made with the same model only. Alternate units will be treated as a new order.

Returning Replaced Defective Units/Parts/Accessories After Unit Repair: (Only applies to steps 1&3 above)

- 1) Repack the replaced unit/ part /accessory in the box which contained the replacement part.
- 2) Parts can be boxed for UPS, FedEx or equivalent ground service. Units shall be secured onto the skid on which the replacement was shipped after placing into the package from the replacement product.
- 3) Ship all replaced products, to YMGI-designated location. You will be charged if YMGI does not receive the replaced parts.

# **CUSTOMER AND TECHNICIAN MUST READ**

Standard factory warranty does not cover the cost of materials and labor that are incurred at your site. There will be no cost for the replacement unit, if YMGI determines the defect is manufacturer related. Replacement will be made with the same model, only. Alternate units will be treated as a new order.

#### CUSTOMER SERVICE / TECHNICAL SUPPORT FROM YMGI GROUP

For questions or help with your unit, contact the original installer or service provider.

YMGI Group does not install nor physically service your unit. Your installer or service provider must check the unit prior to contacting YMGI Group from your jobsite, in order to be helped in an efficient and timely manner.

- \* Factory customer service at customerservice@ymgigroup.com Tel: 1-866-833-3138x704
- \* Factory technical support at techsp@ymgigroup.com Tel: 866-833-3138x703
- \* Fax: 1-866-377-3355

An "YMGI Group Customer Service/Technical Support Daily Log Sheet" will be filed in writing at our office, for effective communication between you and YMGI Group customer service, your technician and YMGI Group technical support. Before contacting the YMGI Group locate the IP# written at the top of your warranty registration form. Use this IP# whenever you contact the YMGI Group.

#### DISTRIBUTOR AND MANUFACTURER POLICIES

- \* All questions concerning sales or money will be directed to the sales distributor from which you purchased the
- \* Read and follow all policies set forth from the distributor from which you purchased your unit.
- \* Upon purchase and installation of the unit(s), you agree to be bounded by all policies published by both distributors and YMGI.
- \* YMGI Group has the final authority and supersedes other related parties (distributors, etc.) concerning all policies regarding YMGI products.

# YMGI DISCLAIMING-3 (RE: LIMITED PRODUCT WARRANTY)

- 1) The YMGI Limited Product Warranty Policy, details the eligibilities, coverage's and other explanations of the warranty terms between YMGI group and the unit owner.
- 2) The YMGI Limited Product Warranty Policy and the Warranty Registration Card/Form are either included inside the user's manual and/or installation instruction manual, or come separately in the unit packaging box/ envelope. If for any reason they are not included with your shipment, contact our sales or customer service to request a copy (electronic or printed), prior to installation.
- 3) The checklist, in the Warranty Registration Card/Form, is for the currently licensed/certified HVAC technician to fill out completely, while verifying all unit functions are operating correctly. This checklist is for the technician to test and check all details of your unit, to verify and ensure its proper operation.
- 4) The technician must complete all fields in the Warranty Registration Card/Form, especially the unit model and serial numbers and distributor information, and most importantly, the technician checklist.
- 5) Warranty Registration Card/Form shall be mailed, along with the original copy of the currently licensed HVAC contractor's full installation invoice, to YMGI Group, within 7-days after original installation, in order for YMGI to review and process your warranty registration.
- 6) Keep a copy of Warranty Registration Card/Form for your own use in the future, to aid in any possible future warranty claiming, any request of parts, customer service, and/or technical support.
- 7) YMGI reserves the right to approve or deny the warranty status based on the information reviewed.

Mailing address of the Warranty Registration Card/Form: Warranty Department, YMGI Group, POB 1559, O'Fallon, MO 63366, USA.





**MUST READ-2** 

# **USER NOTES AND INSTALLATION/SERVICE/MAINTENANCE NOTES**

# **USER NOTES**

Put down whatever questions you have or problems you have seen as a unit history:

No.	Date	Notes	Asked for Your Technician for Help?	Did You Ask YMGI Tech. for Help?

# **INSTALLATION NOTES**

Put down whatever questions you have or problems you have seen as a unit history:

No.	Date	Original Installation Company Name, Technician Name, Phone & HVAC License #	Job Not Performed by Technician	Technician Checklist Completed Fully?

# **SERVICE / MAINTENANCE NOTES**

No.	Date	Contents of Service / Maintenance	Technician's Company Name, Technician Name, Phone & HVAC License #

